

**IN THE CLAIMS:**

Please amend the claims as follows:

Claim 1 (Currently amended): A method Method to fasten an outer shell [[(4)]] in a gyratory crusher [[(1)]], which comprises the outer shell [[(4)]], which is to be fastened in a frame [[(2)]] included in the crusher [[(1)]], and an inner shell [[(12)]], which is intended to be fastened on a crushing head [[(10)]] and to define, together with the outer shell [[(4)]], a crushing gap [[(14)]] for receipt of material to be crushed, wherein characterized in that in a first step a first abutment surface [[(34)]] on the outer periphery of the outer shell [[(4)]] is brought to abutment against a first contact surface [[(32)]] on the frame [[(2)]]], and in that in a second step a spacer member [[(28)]] for clamping of the outer shell [[(4)]] is pressed in between a second abutment surface [[(50)]] on the outer periphery of the outer shell [[(4)]] and the frame [[(2)]]].

Claim 2 (Currently amended): The method Method according to claim 1, wherein said first abutment surface [[(34)]] is situated at the lower end [[(33)]] of the outer shell [[(4)]] seen in a material flow direction [[(M)]], said second abutment surface [[(50)]] being situated closer to the upper end [[(51)]] of the outer shell [[(4)]] seen in the material flow direction [[(M)]].

Claim 3 (Currently amended): The method Method according to claim 2, wherein in the second step the spacer member [[(28)]] is pressed in between the second abutment surface [[(50)]] and the frame [[(2)]] in the direction towards the first abutment surface [[(34)]].

Claim 4 (Currently amended): Method according to claim 1 any one of the preceding claims, wherein in the first step the outer shell [[(4)]] is secured after the first abutment surface [[(34)]] thereof has been brought to abutment against the first contact surface [[(32)]] of the frame [[(2)]]], in the second step the spacer member [[(28)]] being secured after it having been

pressed in between the second abutment surface [[(50)]] of the outer shell [[(4)]] and the frame [[(2)]].

**Claim 5 (Currently amended):** Method according to claim 1 ~~any one of the preceding claims~~, wherein the spacer member [[(28)]] has a first sliding surface [[(52)]] and a second sliding surface [[(54)]] opposite the first sliding surface [[(52)]], the first sliding surface [[(52)]] sliding against the second abutment surface [[(50)]] of the outer shell [[(4)]] and the second sliding surface [[(54)]] sliding against a second contact surface [[(56)]] on the frame [[(2)]] when the spacer member [[(28)]] is pressed in.

**Claim 6 (Currently amended):** Outer shell for fixing in a gyratory crusher [[(1)]], which comprises a frame [[(2)]], wherein the outer shell [[(4)]] should be fastened, and an inner shell [[(12)]], which is securable on a crushing head [[(10)]] in order to, together with the outer shell [[(4)]], define a crushing gap [[(14)]] for receipt of material to be crushed, wherein characterized in that the outer shell [[(4)]] has a first abutment surface [[(34)]], which is arranged to, in a first fixing step, be brought to abutment against a first contact surface [[(32)]] on the frame [[(2)]], and a second abutment surface [[(50)]] that is arranged to, in a second fixing step, be brought in engagement with a spacer member [[(28)]] that is possible to press between the frame [[(2)]] and the second abutment surface [[(50)]].

**Claim 7 (Currently amended):** Outer shell according to claim 6, wherein said first abutment surface [[(34)]] is situated at the lower end [[(33)]] of the outer shell seen in a material flow direction [[(M)]], said second abutment surface [[(50)]] being situated closer to the upper end [[(51)]] of the outer shell [[(4)]] seen in the material flow direction [[(M)]].

Claim 8 (Currently amended): Outer shell according to claim 6 [[or 7]], wherein the second abutment surface [[(50)]] forms an angle to the vertical plane of 0–20 degrees and is arranged to slide against a first sliding surface [[(52)]] on the spacer member [[(28)]].

Claim 9 (Currently amended): Outer shell according to claim 6 any one of claims 6–8, wherein the second abutment surface [[(50)]] is substantially perpendicular to the main direction of the crushing forces [[(C2)]] that during operation arise in plane with the second abutment surface [[(50)]].

Claim 10 (Currently amended): Outer shell according to claim 6 any one of claims 6–9, wherein the first abutment surface [[(34)]] forms an angle to the vertical plane of 10–55 degrees, preferably such an angle that the first abutment surface [[(34)]] forms a substantially right angle to the main direction of the crushing forces [[(C1)]] that during operation arise in plane with the first abutment surface [[(34)]].

Claim 11 (Currently amended): Outer shell according to claim 6 any one of claims 6–10, wherein the second abutment surface [[(50)]] is situated substantially on a level with the portions [[(5)]] of the periphery of the outer shell [[(4)]] that surround the second abutment surface [[(50)]].

Claim 12 (Currently amended): Gyratory crusher, which has an outer shell [[(4)]], which is securable in a frame [[(2)]] included in the crusher [[(1)]], and an inner shell [[(12)]], which is securable on a crushing head [[(10)]] in order to, together with the outer shell [[(4)]], define a crushing gap [[(14)]] for receipt of material to be crushed, wherein characterized in that the outer shell [[(4)]] of the crusher has a first abutment surface [[(34)]], which is arranged to, in a first fixing step, be brought to abutment against a first contact surface [[(32)]] on the frame [[(2)]], and a second abutment surface [[(50)]] that is arranged to, in a second fixing step, be

brought in engagement with a spacer member [[(28)]] that is possible to press in between the frame [[(2)]] and the second abutment surface [[(50)]].

Claim 13 (Currently amended): Gyratory crusher according to claim 12, wherein said first abutment surface [[(34)]] is situated at the lower end [[(33)]] of the outer shell seen in a material flow direction [[(M)]], said second abutment surface [[(50)]] being situated closer to the upper end [[(51)]] of the outer shell [[(4)]] seen in the material flow direction [[(M)]].

Claim 14 (Currently amended): Gyratory crusher according to claim 12 any one of claims 12 and 13, wherein the spacer member is an intermediate ring [[(28)]], which has a substantially tubular part [[(43)]], which is intended to be pressed in between the second abutment surface [[(50)]] of the outer shell [[(4)]] and a second contact surface [[(56)]] on the frame [[(2)]].

Claim 15 (Currently amended): Gyratory crusher according to claim 12 any one of claims 12–14, wherein the spacer member [[(42)]] is divided into two to eight segments (68, 70, 72, 74).

Claim 16 (Currently amended): Gyratory crusher according to claim 12 any one of claims 12–15, wherein the spacer member [[(28)]] has a first sliding surface [[(52)]], which forms an angle to the vertical plane of 0–20 degrees and which is arranged to slide against the second abutment surface [[(50)]] on the outer shell [[(4)]] upon the pressing-in of the spacer member [[(28)]].

Claim 17 (Currently amended): Gyratory crusher according to Claim 12 any one of claims 12–16, wherein the spacer member [[(28)]] has a second sliding surface [[(54)]], which is arranged to slide against a second contact surface [[(56)]] on the frame [[(2)]]], which second contact surface [[(56)]] is terminated by a shoulder [[(62)]] protruding from the frame [[(2)]]], the

lower limitation, in the material flow direction [[(M)]], of the shoulder [[(62)]] being situated substantially at the lower limitation [[(64)]], seen in the material flow direction [[(M)]], of the sliding surface [[(54)]].

Claim 18 (Currently amended): Gyratory crusher according to claim 17, wherein the second contact surface [[(56)]] of the frame [[(2)]] forms an angle to the vertical plane of 0–10 degrees.

Claim 19 (Currently amended): Gyratory crusher according to claim 12 any one of claims 12–18, wherein the upper portion [[(146)]], in the material flow direction [[(M)]], of the spacer member [[(128)]] is protected by a replaceable protecting plate [[(147)]].

Claim 20 (Currently amended): Gyratory crusher according to claim 12 any one of claims 12–19, wherein the spacer member [[(28)]] has a mounting flange [[(44)]], which by means of mounting members [[(58)]] is arranged to press the spacer member [[(28)]] in between the second abutment surface [[(50)]] of the outer shell [[(4)]] and the frame [[(2)]] and to secure the spacer member [[(28)]] against the frame [[(2)]].

Claim 21 (Currently amended): Spacer member for use upon fixing of an outer shell [[(4)]] in a frame [[(2)]] included in a gyratory crusher [[(1)]], which outer shell [[(4)]] is intended to, together with an inner shell [[(12)]]], which is securable on a crushing head [[(10)]], define a crushing gap [[(14)]] for receipt of material to be crushed in the crusher [[(1)]], the outer shell [[(4)]] having a first abutment surface [[(34)]]], which in a first fixing step has been brought to abutment against a first contact surface [[(32)]] on the frame [[(2)]]], and the spacer member [[(28)]] being arranged to, in a second fixing step, be pressed in between a second abutment surface [[(50)]] on the outer shell [[(4)]] and the frame [[(2)]]].